

What is claimed is:

1 1. A backup system for backing up a hard disk of a computer which is
2 connected to a server via a network, characterized in that said server comprises:
3 a boot OS creation section adapted to create a boot OS for said
4 computer;
5 a backup section adapted to store as a file the content of the hard disk in
6 said computer into a designated backup destination;
7 a management information database adapted to store therein
8 management information of said computer; and
9 a kernel image adapted to serve for the creation of said boot OS.

1 2. The backup system as claimed in claim 1, wherein said server further
2 comprising a restore section is adapted to restore the content of said hard disk into
3 the same hard disk in said computer or into a hard disk of another computer by
4 using the file which has been stored as a file by said backup section.

1 3. A backup system for backing up a hard disk of a computer which is
2 connected to a server via a network,
3 characterized in that said server comprises:
4 i) a boot OS creation section adapted to create a boot OS for
5 said computer and to store it into a boot media;
6 ii) a management information database adapted to store therein
7 management information of said computer; and
8 iii) a kernel image adapted to serve for the creation of said boot
9 OS,
10 and further characterized in that said boot media comprises:
11 iv) a backup section adapted to store as a file the content of the
12 hard disk in said computer into a designated backup destination;

13 and
14 v) a restore section adapted to restore the content of said hard disk
15 into the same hard disk in said computer or into a hard disk of
16 another computer by using the file which has been stored as a file
17 by said backup section.

1 4. The backup system as claimed in any one of claims 1 to 3, wherein said
2 boot OS creation section includes:

3 a parameter creating portion adapted to allow said kernel image to serve
4 as said boot OS; and

5 a writing portion adapted to store said boot OS.

1 5. The backup system as claimed in any one of claims 1 to 4, wherein said
2 backup section includes:

3 an information managing portion adapted to manage information for
4 backup;

5 a reading portion adapted to read the content of the hard disk in said
6 computer while compressing it; and

7 a writing portion adapted to write said compressed content into said
8 designated backup destination.

1 6. The backup system as claimed in any one of claims 1 to 4, wherein said
2 restore section includes:

3 an information managing portion adapted to manage information for
4 restore;

5 a reading portion adapted to read a file of a restore origin while
6 expanding it; and

7 a writing portion adapted to write this expanded content into a hard disk
8 as a restore destination.

1 7. The backup system as claimed in any one of claims 1 to 6, wherein said
2 backup section includes a padding portion adapted to pad an unassigned region in
3 the hard disk in said computer with specific values.

1 8. The backup system as claimed in any one of claims 5 to 7, wherein said
2 information managing portion included in said backup section is adapted to store
3 certification data, and wherein said restore section includes a certifying portion
4 adapted to perform certification using said stored certification data by said
5 information managing portion included in said restore section.

1 9. A method of backing up a hard disk connected to a computer,
2 characterized by comprising the steps of:

3 creating a boot OS for booting said computer by using an external
4 storage device or via a network, independently of an OS installed in said
5 computer as a backed-up object;

6 booting said computer with said boot OS; and

7 backing up the content of the hard disk connected to said computer into
8 a server via said network, into a storage medium over said network, or into a
9 storage medium directly connected to said computer.

1 10. The method as claimed in claim 9, further comprising the step of
2 restoring said content of the hard disk connected to said computer into a hard disk
3 connected to another computer by using a file backing up the content of the hard
4 disk in said computer.

1 11. A program run in a server or a computer via a network, characterized by
2 comprising:

3 a creating function adapted to create a boot OS for said computer;

4 a backup function adapted to store as a file the content of a hard disk in
5 said computer into a designated backup destination; and
6 a restore function adapted to restore the content of said hard disk into the
7 same hard disk in said computer by using the file which has been stored as a file
8 by said backup function.

1 12. A backup service provision system for providing a backup of a hard disk
2 of a computer connected to a server via the Internet, characterized in that said
3 server comprises:

4 a boot OS creating section adapted to create a boot OS for said
5 computer;

6 a backup section adapted to store as a file the content of the hard disk in
7 said computer into a designated backup destination;

8 a management information database adapted to store management
9 information for said computer; and

10 a kernel image adapted to serve for the creation of said boot OS, and

11 wherein said backup service provision system is configured to back up

12 any computers connectable to said server.

1 13. The backup service provision system as claimed in claim 12, wherein
2 said server further comprises a restore section adapted to restore the content of
3 said hard disk into the same hard disk in said computer by using the file which
4 has been stored as a file by said backup section.